UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

39232

7590

09/22/2009

Themis Law 7660 Fay Ave Ste H-535 La Jolla, CA 92037 EXAMINER

KWON, PHILIP

ART UNIT PAPER NUMBER

3634 DATE MAILED: 09/22/2009

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/598,547	06/24/2007	Filippo Ramin	06UVB006	7161	

TITLE OF INVENTION: ENERGY-SAVING AUTOMATIC WINDOW OBTAINED BY USING SOLAR ENERGY DURING THE COLD SEASON, CONTROL OF SOLAR RADIATION IN SUMMER, THERMAL INSULATION, CONTROLLED INTERNAL INCIDENCE OF LIGHT, CONTROLLED AIR EXCHANGE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	12/22/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	ed below or directed otl	ng the Patent, advance of herwise in Block 1, by ((a) specifying a new c	of n orres	naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sep	corr arate	espondence address as "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
39232 Themis Law 7660 Fay Ave S La Jolla, CA 920	te H-535	V2009		State	reby certify that the es Postal Service we essed to the Mail	is Fee(tith suf Stop	ficient postage for fir	g dep st cla abov	osited with the United ss mail in an envelope e, or being facsimile
									(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CC	ONFIRMATION NO.
10/598,547	06/24/2007		Filippo Ramin				06UVB006		7161
TITLE OF INVENTION CONTROL OF SOLAR AIR EXCHANGE		AUTOMATIC WINDO MER, THERMAL INSU							
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUI	E FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	YES	\$755	\$300		\$0		\$1055		12/22/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	ss					
KWON,	PHILIP	3634	160-107000						
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.		" Indication form ned. Use of a Customer	(1) the names of u or agents OR, alter (2) the name of a registered attorney 2 registered patent listed, no name wi	single or a attor	rely, e firm (having as a gent) and the nam meys or agents. If printed.	memb es of u	er a 2 o to		
recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comj GNEE	ified below, no assignee pletion of this form is NC	data will appear on to T a substitute for filing (B) RESIDENCE: (C	he pa g an a	attent. If an assignassignment.	OUNT	RY)		
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):		Individual 🖵 Co	rporati	on or other private gr	oup e	ntity Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).						
5. Change in Entity Sta	tus (from status indicate as SMALL ENTITY state	· · · · · · · · · · · · · · · · · · ·	☐ h. Applicant is no	lone	per claiming SMAI	L EN	ΓΙΤΥ status. See 37 C	FR 1	27(0)(2)
NOTE: The Issue Fee an interest as shown by the									
Authorized Signature Typed or printed name									
				ı or r					
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	d application form to the ions for reducing this bu ⁷ irginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the D NOT SEND FEES OR	1.14. This collection is y depending upon the ne Chief Information C COMPLETED FORM	is est indiv Office IS TO	imated to take 12 r idual case. Any co r, U.S. Patent and D THIS ADDRESS	minutes mment Traden	to complete, including son the amount of times. Office, U.S. Dep D TO: Commissioner	ig gai me yo artmo	thering, preparing, and ou require to complete ent of Commerce, P.O. atents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/598,547	06/24/2007	Filippo Ramin	06UVB006	7161		
39232 73	590 09/22/2009		EXAM	IINER		
Themis Law			KWON, PHILIP			
7660 Fay Ave Ste			ART UNIT	PAPER NUMBER		
La Jolla, CA 9203	7		3634			
		DATE MAILED: 09/22/200	9			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 198 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 198 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/598,547	RAMIN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	PHILIP S. KWON	3634	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 6/10/2009.	(OR REMAINS) CLOSED in or other appropriate commeter appropriate commeters. This application is	n this application. If not included unication will be mailed in due cou	rse. THIS
-			
2. The allowed claim(s) is/are <u>38-73</u> .			
 Acknowledgment is made of a claim for foreign priority unally All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Applicati	on No	from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the require	ements
4. A SUBSTITUTE OATH OR DECLARATION must be subminsformal PATENT APPLICATION (PTO-152) which give			CE OF
5. X CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) 🔲 including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☑ including changes required by the attached Examiner's Paper No./Mail Date			
ldentifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			ck) of
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I	SIT OF BIOLOGICAL MAT FOR THE DEPOSIT OF BI	ERIAL must be submitted. Note OLOGICAL MATERIAL.	the
Attachment(s)	5 □ NaCas at l	Samuel Detect Annilantian	
1. Notice of References Cited (PTO-892)	<u> </u>	nformal Patent Application	
 Notice of Draftperson's Patent Drawing Review (PTO-948) MInformation Disclosure Statements (PTO/SB/08), 	Paper No.	summary (PTO-413), /Mail Date s Amendment/Comment	
Paper No./Mail Date	_		200
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8. ☐ Examiners 9. ☐ Other	Statement of Reasons for Allowar	ıc e
		 W MITCHELL/	
		itent Examiner, Art Unit 3634	

Art Unit: 3634

EXAMINER'S AMENDMENT

Election/Restrictions

1. Applicant's election with traverse of Species 1 in the reply filed on 6/10/2009 is acknowledged. The traversal is on the ground(s) that there is no burdensome search. This is not found persuasive because a search for the different species will require text searches in numerous databases.

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 50, 56-57, and 66-68 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/10/2009.
- 3. Claims 50, 56-57, and 66-68 are allowable. The restriction requirement for the species, as set forth in the Office action mailed on 6/10/2009, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim. Claims 50, 56-57, and 66-68, directed to separate species withdrawn from further consideration because the claims require all the limitations of an allowable generic linking claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present

application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Franco A. Serafini on 9/15/2009.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "19" has been used to designate both levers and drive shafts. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the

Art Unit: 3634

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following feature(s) must be shown or the feature(s) canceled from the claim(s). **No new matter should be**entered. The feature(s) that need to be shown are:
 - a plurality of mating parts, a first mating part being affixed to the frame and a second mating part being movable from the first mating part
 - wherein the plurality of mating parts are separable manually
 - each action lever is coupled to the inner or outer casements via a piston system (can be shown with black box)
 - wherein the blind or curtain is motor-driven (can be shown with black box)
 - a conduit disposed within a space between two glass sheets (can be shown with black box)
 - a conduit disposed within the volume (can be shown with black box)

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

Art Unit: 3634

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The application has been amended as follows:

In the specification:

Paragraph [0021]: The sentences - - The inner window casement comprises a plurality of mating parts, a first mating part of the plurality of mating parts being affixed to the frame and a second mating part of the plurality of mating parts being movable from the first part, wherein the plurality of mating parts are separable manually. The window panes are made of insulating glass, wherein the insulating glass comprises two parallel glass sheets spaced one from the other, further comprising a conduit disposed within a space between the two glass sheets, the conduit heating or cooling the space, wherein the conduit heats or cools the space by the temperature differential between the space and a liquid flowing in the conduit. - - has been added at the end of the paragraph;

Art Unit: 3634

Paragraph [0032]: The sentence - - According to another alternative design, each of the action levers is coupled to the inner or the outer casements via a piston system. - -;

In the claims:

- Claim 38, lines 7-8: The phrase "a first mating part being affixed to the frame and a second of the mating part being movable from the first mating part;" has been replaced with the phrase - a first mating part of the plurality of mating parts being affixed to the frame and a second mating part of the plurality of mating parts being movable from the first mating part; -;
- Claim 38, line 11: The phrase - said plurality of action levers comprising
 - has been inserted between the words "volume," and "a";
- Claim 38, line 13: The phrase "volume symmetrically from the first group of action levers," has been replaced with the phrase - volume, said first group and said second group being symmetrical along a vertical axis, -;
- Claim 40, line 2: The phrase "are enclosed within" has been replaced with the phrase - is adjacent -;
- Claim 56: The phrase "the rod or the rack and pinion system may be straight or curved." has been replaced with the phrase - a rod or a rack and pinion system of the window system may be straight or curved. -;

Application/Control Number: 10/598,547

Art Unit: 3634

- Claim 57: The phrase "the rod or the rope" has been replaced with the phrase - - a rod or a rope of the window system - -;

Page 7

- Claim 61: The word "pluralities" has been replaced with the word plurality -;
- Claim 62: The phrase "by being coupled is coupled with a piston system."
 has been replaced with the phrase - via a piston system. -;
- Claim 64: The phrase "is coupled to the inner or outer casements by being slidably coupled to a bracket with a rotating pin, the bracket sliding within a guide block." has been replaced with the phrase - is slidably coupled to the inner or outer casements via a bracket with a rotating pin, said bracket sliding within a guide block. -;
- Claim 66: The phrase "a first and a second auxiliary levers coupled to one of the action levers, the first auxiliary lever coupling the action lever to the outer or inner window casement, to one end of the action lever, and to the second auxiliary lever, the second auxiliary lever coupling the first auxiliary lever to the frame." has been replaced with the phrase - a first auxiliary lever and a second auxiliary lever, wherein the first auxiliary lever couples one of the action levers to the outer or inner window casement, and wherein the second auxiliary lever couples the first auxiliary lever to the frame. -; and
- Claim 73: The phrase "the blind or curtain" has been replaced with the phrase - a blind or curtain is -.

Art Unit: 3634

4. Claims 38-73 are allowed.

5. The following is an examiner's statement of reasons for allowance: The prior art fails to disclose two movable window panes disposed on opposite sides of a frame to define a volume enclosed between the window panes and the frame; an actuation system disposed within the volume, the actuation system comprising drive shafts connected to drive motors; a plurality of action levers, a first group of action levers being situated in an upper part of the volume, a second group of action levers being situated in the lower part of the volume, each action lever having a first end and a second end, each action lever in the first group being coupled at the first end to the first end of an action lever in the second group, each second end being coupled to an outer or inner casement so that the actuation system causes the action levers to rotate and the window panes to move relative to one another; and a plurality of multiple hinges each coupling one of the inner or outer casements to the frame.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: see PTO-892 Notice of Reference Cited.

Art Unit: 3634

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP S. KWON whose telephone number is (571)270-5230. The examiner can normally be reached on Mon - Fri 7:30-5, every other Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on (571)272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Philip S Kwon/ Examiner, Art Unit 3634 /KATHERINE W MITCHELL/ Supervisory Patent Examiner, Art Unit 3634